

CLAIMS

1. Filter device (1) for a water treatment - or sewage treatment plant, comprising a basin for receiving water to be filtered and arranged within it a rotating filter (2) with essentially the form of a cylinder, said rotating filter with a horizontal axis of rotation (21), **characterised in** that the rotating filter (2) is arranged in its own separate filter chamber (3), and that a bottom (4) of the filter chamber (3) is designed as following a contour of the rotating filter (2).
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2. Filter device (1) in accordance with claim 1, wherein the bottom (4) of the filter chamber (3) approximately forms half of a hollow cylindrical body (41).
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3. Filter device (1) in accordance with claim 2, wherein the axis of rotation (21) of the rotating filter (2) at least approximately coincides with one cylinder axis of the half of a hollow cylindrical body (41).
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4. Filter device (1) in accordance with one of the preceding claims, wherein a front wall (6b) of the filter chamber (3) running vertically to the axis of rotation (21) of the rotating filter (2) comprises a means (22) for the sucking off of permeate.
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5. Filter device (1) in accordance with one of the preceding claims, wherein the filter chamber (3) is separably connected with a further basin (7), in particular with an activated sludge basin (7).
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6. Filter device (1) in accordance with claim 5, comprising a pump (8) for the provision of liquid from the further basin (7) into the filter chamber (3) over a first overflow (82), and comprising a second overflow (61) situated at a lower level for the return flow of the liquid from the filter chamber (3) into the further basin (7).
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7. Filter device (1) in accordance with claim 6, wherein the filter chamber (3) is arranged adjacent to the further basin (7) and is separated from this further basin (7) by a wall (6a) with an overflow (61).

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8. Filter device (1) in accordance with one of the preceding claims, wherein the bottom (4) of the filter chamber (3) comprises means (42) for the separate emptying of the filter chamber (3) without the emptying of the further basin (7).

10 9. Filter device (1) in accordance with one of the preceding claims, comprising one or more rotating filters (2), wherein every rotating filter (2) is respectively arranged within its own dedicated separate filter chamber (3).

15 10. Method for the periodic cleaning of a filter device in accordance with one of the claims 1 to 8, characterised in that the method comprises the following steps:

- separation of the filter chamber (3) from other water conducting parts (7) of the installation,
- pumping-off or draining of water present in the filter chamber (3),
- filling of the filter chamber (3) with cleaning liquid up to approximately just below the axis of rotation (21) of the rotating filter (2),
- 20 - rotation of the rotating filter (2),
- pumping-off or draining of the used cleaning liquid,
- re-establishment of the connections to the other water conducting parts of the installation.

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11. Method in accordance with claim 10, wherein in an intermediate step the rotating filter (2) is put into rotation for a mechanical rough cleaning.